

Amendments to the Claims:

This listing of claims replaces all prior listings, and versions, of claims in the present application.

Listing of Claims:

1-12. (Canceled)

13. (Currently Amended) A speech recognition system in which an utterance to be recognised is represented as a sequence of phonetic segment models in which a transition probability represents the probability of the occurrence of a transition between the models, comprising:

means for estimating the number of phonetic segments in the utterance to be recognized; and

means for biasing the transition probabilities in dependence on the estimated number of phonetic segments in length of the utterance.

14. (Original) A speech recognition system according to claim 13, wherein the biasing means comprise means for applying a transition bias to each of the transition probabilities between a plurality of phonetic segment models.

15. (Original) A speech recognition system according to claim 14, operable to recognise utterances from a recognition vocabulary, wherein the transition bias is calculated as the transition bias which maximises recognition performance on a validation data set which represents the recognition vocabulary.

16. (Original) A speech recognition system according to claim 15, wherein the validation data set has the same vocabulary as the recognition vocabulary.

17. (Canceled)

18. (Previously Presented) A speech recognition system according to claim 13, wherein the estimating means comprises a speaker specific rate of speech estimator.

19. (Previously Presented) A speech recognition system according to claim 13, wherein the estimating means comprises a Free Order Viterbi decoder.

20. (Previously Presented) A speech recognition system according to claim 13, wherein the estimating means comprises a neural network classifier.

21. (Previously Presented) A speech recognition system according to claim 13, wherein the transition bias is set in response to the result of the estimating means.

22. (Original) A speech recognition system according to claim 21, comprising table look-up means for setting the transition bias in accordance with the number of phonetic segments in the utterance.

23. (Previously Presented) A speech recognition system according to claim 21, comprising direct setting means for setting the transition bias as proportional to the number of phonetic segments in the utterance.

24. (Original) A speech recognition system according to claim 23, wherein the direct setting means is arranged to set the transition bias to be equal to the number of phonetic segments in the utterance.

25. (Original) A speech recognition system according to claim 13, wherein the or each phonetic segment comprises a phoneme.

26. (Original) A speech recognition system according to claim 13, wherein the or each

utterance comprises a word.

27. (Currently Amended) A speech recognition system in which an utterance to be recognised is represented as a sequence of phonetic segment models in which a transition probability represents the probability of the occurrence of a transition between the models, comprising:

a phonetic segment estimator arranged to output an estimate of the number of phonetic segments in the utterance; and

a processing module for applying a transition bias to the transition probability in dependence on the estimate of the number of phonetic segments in the utterance~~-response to the output of the estimator.~~

28. (Previously Presented) A portable communications device including a speech recognition system according to claim 27.

29. (Previously Presented) A method of speech recognition in which an utterance to be recognised is represented as a sequence of phonetic segment models in which a transition probability represents the probability of the occurrence of a transition between the models, the method comprising biasing the transition probabilities in dependence of the number of phonetic segments in the utterance.

30. (Original) A method according to claim 29, comprising decoding the sequence of phonetic segment models after application of the transition bias.

31. (Original) A method according to claim 29, comprising decoding the sequence of phonetic segment models without the application of transition bias and normalising the resulting scores by a contribution proportional to the transition bias.

Appl. No.: 10/020,895
Filed: December 19, 2001
Amdt. dated 08/31/2006

32. (Original) A method according to claim 31, comprising calculating the transition bias in parallel with the decoding of the sequence of phonetic segment models.